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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,199	09/24/2003	Tamaki Nakamura	2936-0198P	4107

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EXAMINER	
PETERSON, CHRISTOPHER K	

ART UNIT	PAPER NUMBER
2622	

NOTIFICATION DATE	DELIVERY MODE
06/25/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/668,199	NAKAMURA, TAMAKI	
	Examiner	Art Unit	
	CHRISTOPHER K. PETERSON	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 April 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The Amendment After Non-Final Rejection filed on 4/20/2009 has been received and made of record. Examiner notes that the Applicant had amended claims 1 and 7. Claims 1 - 7 are pending in this application.

Response to Arguments

2. Applicant's arguments with respect to claims 1 and 7 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1 – 3, 5, and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US Patent Pub. 2002/0001395) in view of Parulski (US Patent Pub. # 2003/0058354) and further in view of Tomono (US Patent Pub. # 2003/0063186).

As to claim 1, Davis teaches an electronic apparatus for obtaining and memorizing image data representing an image and displaying the image represented by the image data thus memorized, comprising:

- a communications section (transceiver 52) that externally obtains image data having a filename and representing an image (Para 40 – 42);
- a controller (CPU 22) that analyzes information attached to the filename and the image data, extracts the information as attributes of the image data, and produces, from the image data, thumbnail image data representing a thumbnail image (Para 35 and 95 - 97). Davis teaches a stereographic encoder may be located within the camera. Davis teaches the encoder converts auxiliary data to be embedded in the image into watermark signal and combines the watermark signal with the image. This auxiliary data may include one or more references, a machine instruction or set of instructions, and other data items about the image (Para 96).
- a first memory (memory subsystem 20) that memorizes, as a single file, the image data, the attributes of the image data (Para 38). Davis teaches the memory subsystem 20 includes a combination of ROM, RAM, and removable storage devices such as a flash memory card.
- a second memory (metadata server) that is provided separately from the first memory (20) and further memorizes the attributes of the image data (Para 105). Davis teaches the auxiliary data associated with the image can be maintained separately from the image.
- a display section (display 24) that displays the image represented by the image data in a two dimensional mode or a three dimensional mode

according to whether dimensional information included in the attributes memorized in the second memory represents a two dimensional image or a three dimensional image (Para 39 and 177). Davis teaches metadata in images also applies to other media signals, including audio, and video signals, and computer graphics models (e.g., two-dimensional, three-dimensional graphical models and animation) (Para 177).

Davis does not teach the storing of a thumbnail image data of the image. Parulski teaches wherein the memory (memory 50) further stores a thumbnail image data (low resolution thumbnail version) of image (Para 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the low resolution thumbnail version of the image as taught by Parulski to the host computer of Davis, because using a standard, "finished" image file format so that the images can be used by many applications, yet also enables image processing from raw camera data to final output data to be completed in a single, integrated process, to provide improved image quality when printing (Para 12 of Parulski).

Davis in view of Parulski do not specifically teach a three dimensional mode for stereoscopic view. Tomono teaches a two-dimensional (2D)/three-dimensional (3D) convertible display using a micro lens array, and more particularly, to a 2D/3D convertible display, which can be easily converted between a 2D display and a 3D display and vice versa, using an electro-optic material of which the refractive index varies according to applied power (Para 2). Tomono teaches a three dimensional mode for stereoscopic view (Para 29 and 30). Tomono teaches a 2D/3D convertible display

(Para 28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a 2D/3D convertible display as taught by Tomono to the host computer of Davis in view of Parulski, to provide a two-dimensional (2D)/three-dimensional (3D) convertible display, which is capable of implementing 2D and 3D images in a single display without adding an additional device (Para 10 of Tomono).

As to claim 2, Davis teaches further comprising: wherein the communications section (52) obtains the image data via the Internet (Para 51). Davis teaches the camera 100 is connected to a network 102, such as the Internet, and another device, such as a server 108, sends the information through the network to the camera, which is connected to the network (Para 51).

As to claim 3, Davis teaches further comprising: a camera (camera 10) for photographing the image so that the image data is obtained by the camera (Para 32 and 33).

As to claim 5, Davis teaches the electronic apparatus as claimed in claim 1, wherein the attributes of the image data further include a type of the image (Para 115), an attribute of copyright for the image (Para 116), the filename of the file (picture identifiers, e.g., industry or application specific identifiers Para 120), and an image size expressed in numbers of pixels constituting the image in horizontal and vertical directions respectively (Para 113 and 130). Davis teaches image data framework described above supports a variety of different data types. Davis teaches the resolution

is defined under two places. Examiner analyzes resolution to mean the image size along with the horizontal and vertical directions.

As to claim 6, Davis teaches wherein the image includes an image for electronic animation (computer graphics models (e.g., two-dimensional, three-dimensional graphical models and animation)) (Para 177).

1. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US Patent Pub. 2002/0001395) in view of Parulski (US Patent Pub. # 2003/0058354), further in view of Tomono (US Patent Pub. # 2003/0063186), and further in view of Wada (US Patent # 6,965,413).

As to claim 4, Davis teaches an audio capture device may be adapted to insert a stereographic link in one or more audio segments as the audio signal is being captured, or shortly thereafter, before the encoded signal is transferred from the device (Para 179) and camera may also include a cellular or conventional modem 54 for transferring data to and from a telephone network (Para 43). Davis does not specifically teach an input section for inputting audio; an output section for outputting audio. Wada reference cites a foldable portable terminal unit containing a picture taking device capable of transmitting both image and voice. Wada (Fig. 6) teaches an input section for inputting audio (receiver 15) (Col. 2, lines 55 – 58); an output section for outputting audio (speaker 13) (Col. 2, lines 55 – 58); and a communications section for transmitting and receiving audio (voice codec section 19, transmission controller 20 and network interface 21) (Col. 4, lines 12 – 19), wherein the electronic apparatus (mobile phone 1)

functions as a telephone (1) Col. 2, lines 51 – 61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a communications section for connecting to the Internet and obtaining the image data as taught by Wada to the host computer of Davis in view of Parulski and further in view of Tomono, because the display device disposed in the lid portion is constructed to be foldable and rotatable freely with the picture taking camera fixed in the case main body. Thus, by rotating or folding the lid portion corresponding to his or her own image or an image of an outside object taken with the picture taking camera, user can monitor that image with the display device in a state suitable for taking picture. Further, reduction of the size thereof is achieved, so that a portable terminal unit convenient for carrying can be provided (Col. 5, lines 45 – 55 of Wada).

2. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US Patent Pub. 2002/0001395) in view of Parulski (US Patent Pub. # 2003/0058354) and further in view of Tsang (US Patent # 6,510,002)

As to claim 7, Davis teaches an electronic apparatus for obtaining and memorizing image data representing an image and displaying the image represented by the image data thus memorized, comprising:

- a communications section (transceiver 52) that externally obtains image data having a filename and representing an image (Para 40 – 42);
- a controller (CPU 22) that analyzes information attached to the filename and the image data, extracts the information as attributes of the image

data, and produces, from the image data, thumbnail image data representing a thumbnail image (Para 35 and 95 - 97). Davis teaches a stereographic encoder may be located within the camera. Davis teaches the encoder converts auxiliary data to be embedded in the image into watermark signal and combines the watermark signal with the image. This auxiliary data may include one or more references, a machine instruction or set of instructions, and other data items about the image (Para 96).

- a first memory (memory subsystem 20) that memorizes, as a single file, the image data, the attributes of the image data (Para 38). Davis teaches the memory subsystem 20 includes a combination of ROM, RAM, and removable storage devices such as a flash memory card.
- a second memory (metadata server) that is provided separately from the first memory (20) and further memorizes the attributes of the image data (Para 105). Davis teaches the auxiliary data associated with the image can be maintained separately from the image.
- a display section (display 24) that displays the image represented by the image data in a two dimensional mode or a three dimensional mode according to whether dimensional information included in the attributes memorized in the second memory represents a two dimensional image or a three dimensional image (Para 39 and 177). Davis teaches metadata in images also applies to other media signals, including audio, and video

signals, and computer graphics models (e.g., two-dimensional, three-dimensional graphical models and animation) (Para 177).

Davis does not teach the storing of a thumbnail image data of the image. Parulski teaches wherein the memory (memory 50) further stores a thumbnail image data (low resolution thumbnail version) of image (Para 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the low resolution thumbnail version of the image as taught by Parulski to the host computer of Osaka, because using a standard, "finished" image file format so that the images can be used by many applications, yet also enables image processing from raw camera data to final output data to be completed in a single, integrated process, to provide improved image quality when printing (Para 12 of Parulski).

Davis in view of Parulski do not specifically teach a three dimensional mode for stereoscopic view. Tomono teaches a two-dimensional (2D)/three-dimensional (3D) convertible display using a micro lens array, and more particularly, to a 2D/3D convertible display, which can be easily converted between a 2D display and a 3D display and vice versa, using an electro-optic material of which the refractive index varies according to applied power (Para 2). Tomono teaches a three dimensional mode for stereoscopic view (Para 29 and 30). Tomono teaches a 2D/3D convertible display (Para 28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a 2D/3D convertible display as taught by Tomono to the host computer of Davis in view of Parulski, to provide a two-dimensional (2D)/three-dimensional (3D) convertible display, which is capable of implementing 2D

and 3D images in a single display without adding an additional device (Para 10 of Tomono).

Davis in view of Parulski and further in view of Tomono do not teach the controller is capable of generating three dimensional image data from the image data representing a two dimensional image. Tsang reference teaches an apparatus for generating a three-dimensional display from a conventional television screen or computer monitor, and in particular to an adapter that may be placed in front of a television screen or computer monitor to enable three-dimensional images to be perceived by a viewer (Col. 1, lines 6 – 10). Tsang teaches if the image data represents a two dimensional image, the controller (control signal) is capable of generating three dimensional image data from the image data representing a two dimensional image by extracting every other set among sets (odd and even fields) each comprising R pixel data, G pixel data, and B pixel data from the image data so as to make image data for a left eye, and, then, image data for a right eye is produced by positioning each set comprising R pixel data, G pixel data, and B pixel data included in the image data for the left eye in such a way that the closer said each set is situated to either of right and left ends in a horizontal direction, the more said each set is shifted towards the right end (Col. 3, line 45 – Col. 4, line 36). Tsang teaches during the odd fields, the left image is displayed on the screen 2. In the odd fields, the control region displays white horizontal bars and they drive the output of the photodetector to zero. This means that the polarization angle is also zero and thus the left lens is transparent and the right lens opaque. Thus only the left eye can see the image, which is correct, as it is the left image

that is being displayed. Conversely during the even fields the right image is shown. In the even fields the control region displays the dark horizontal bars and drives the photodetector voltage to VF. The polarization angle is then set at 90 and the right lens is transparent and the left lens is opaque. Thus only the right eye sees the right images (Col. 4, lines 24 – 36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the controller capable of generating three dimensional image data from the image data representing a two dimensional image as taught by Tsang to the camera system of Davis in view of Parulski, because the polarization angle is held constant in both the odd and even fields (Col. 2, lines 55 – 67 of Tsang).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER K. PETERSON whose telephone number is (571)270-1704. The examiner can normally be reached on Monday - Friday 6:30 - 4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Sinh can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. K. P./
Examiner, Art Unit 2622
6/19/2009

/Sinh Tran/
Supervisory Patent Examiner, Art Unit 2622